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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,767	08/07/2006	J. David Schaffer	2004P00387WOUS	3848
	7590 07/08/201 CLLECTUAL PROPER	EXAMINER		
P. O. Box 3001 BRIARCLIFF MANOR, NY 10510		WHALEY, PABLO S		
			ART UNIT	PAPER NUMBER
			1631	
			NOTIFICATION DATE	DELIVERY MODE
			07/08/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)	
10/597,767	SCHAFFER ET AL.	
Examiner	Art Unit	
PABLO WHALEY	1631	

P	ABLO WHALEY	1631				
The MAILING DATE of this communication appears	s on the cover sheet with the d	correspondence address				
THE REPLY FILED 06 June 2011 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.						
1. The reply was filed after a final rejection, but prior to or on th application, applicant must timely file one of the following repapplication in condition for allowance; (2) a Notice of Appeal for Continued Examination (RCE) in compliance with 37 CFI periods:	olies: (1) an amendment, affidavi (with appeal fee) in compliance	t, or other evidence, which places the with 37 CFR 41.31; or (3) a Request				
 The period for reply expires 3 months from the mailing date of the final rejection. The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). 						
Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL						
2. The Notice of Appeal was filed on A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).						
AMENDMENTS						
3. Me proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will <u>not</u> be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below);						
(c) They are not deemed to place the application in better appeal; and/or	form for appeal by materially red	ducing or simplifying the issues for				
(d) They present additional claims without canceling a cor		ected claims.				
NOTE: <u>See Continuation Sheet</u> . (See 37 CFR 1.116						
 The amendments are not in compliance with 37 CFR 1.121. Applicant's reply has overcome the following rejection(s): 		mpliant Amendment (PTOL-324).				
S. Newly proposed or amended claim(s) would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).						
7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: 1,2,5,6,9-21 and 26. Claim(s) withdrawn from consideration:						
AFFIDAVIT OR OTHER EVIDENCE						
8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will <u>not</u> be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).						
The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will <u>not</u> be entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).						
10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.						
REQUEST FOR RECONSIDERATION/OTHER 11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.						
12. Note the attached Information <i>Disclosure Statement</i> (s). (PTO/SB/08) Paper No(s) 13. Other:						
/Marjorie Moran/ Supervisory Patent Examiner, Art Unit 1631	/Pablo S. Whaley/ Examiner, Art Unit 1631					
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Continuation of 3. NOTE: Applicant's amendment After Final, filed 06/06/2011, will not be entered for the following reasons.

The claims, if amended as proposed, would not avoid any of the rejections set forth in the last Office action, and thus the amendment would not place the case in condition for allowance or in better condition for appeal.

In addition, applicant's amendment, if entered, would introduce withdrawn subject matter. In particular, claim 1 is amended to recite "the computational genetic evolving including mating pairs of parent chromosomes of the present generation chromosome population to generate offspring chromosomes." Applicant's previous election with traverse of Species (iv), as recited claim 9, directed to species of genetically evolved genes, in the reply filed on 04/28/2010 is reiterated. Therefore, this subject matter would be withdrawn if entered.

Continuation of 11. does NOT place the application in condition for allowance because:

Applicant's arguments filed 06/06/2011 that the finality of the Office Action should be withdrawn have been fully considered but are not persuasive for the following reasons.

In response to applicant's arguments on page 10 that the limitation "selectively mutating gene values of the offspring chromosomes that are UNIQUE to one or the other of the parent chromosomes without mutating gene values of the offspring chromosomes that are common to both parent chromosomes", as recited in claim 15 (step ii), has not been addressed, the Final Office action acknowledged that Ooi does not teach the selective mutating of the gene value that are unique to one or the other of the parent chromosomes, and does not teach this limitation wherein the mutation rate is greater than 5%. Nevertheless, the claims (as filed 12/21/10) recited generating offspring chromosomes by doing TWO things: (i) filling genes (biased toward one end of an ordered set) with gene values common to both parents AND (ii) filling "remaining" genes with values that are UNIQUE to one or more parents. Applicant appears to be arguing that the combination of Ooi and Chitoui does not teach limitation (ii), which is a conditional limitation. After further consideration of the teachings of Ooi and Chitoui, applicant's arguments are not persuasive for two reasons; (1) the prior art of Ooi (on page 39, col. 2, ¶4) teaches producing offspring strings by crossing over genetic information from the two parents, and repeats this procuess until all parent strings in the mating pool have been considered, which suggests filling ALL genes of the offspring chromosome with gene values common to both parent chromosomes. Because there are no "remaining" genes, step (ii) becomes moot; in addition, (2) the prior art of Chitoui (on page 79, entire section #5) teaches a crossover operation wherein ALL the genes of the binary offspring chromosomes are filled with gene values common to both binary parent chromosomes (namely, 0 and 1), in which case there are no "remaining" genes and step (ii) becomes moot. Therefore, applicant's arguments are not persuasive and the teachings of Ooi and Chitoui teach and/or suggest (i) filling genes (biased toward one end of an ordered set) with gene values common to both parents, as claimed, which renders step (ii) moot (since it is a conditional limitation).

In response to applicant's arguments on page 11 that Ooi and Chitoui do not teach introducing a selected level of noise into values of measurements of the measured subjects, as in claim 19, it is acknowledged that a clerical error was made because claim 19 was included in the rejection statement under Ooi and Chitoui (on page 6 of the Final Office Action mailed 4/5/2011) and was not included in the rejection statement. However, even in view of the clerical error, the body of the rejection under Ooi, Chitoui, and Liu (in the Final Office Action on page 11, last 4 lines) clearly states "Ooi and Chtioui do not teach introducing a selected level of noise into values of measurements of the measured subjects, as in claims 11, 19, and 26." In addition, both the Non-Final Action (mailed 08/17/2010) and the Final Office Action on page 12 show that Liu teaches the introduction of noise, and makes the case for prima facie obviousness. Therefore, applicant's arguments are not persuasive because claim 19 has been properly rejected as being prima facie obvious over the combination of Ooi, Chitoui, and Liu, and applicant is not arguing the merits of Liu, but instead is arguing clerical issues.

In response to applicant's arguments on page 12 that the limitation for "selecting chromosomes that survive into each successive generation using a selection criteria biased toward selecting chromosomes having a smaller number of expressed genes over a larger number of expressed genes, Ooi teaches a selection process based on survival of the fittest (page 38, col. 1, 3), which inherently results in selecting a smaller number of expressed genes because it uses termination conditions. In addition, Ooi teaches that empty spots (i.e. unexpressed genes) on the microarray are excluded from the genetic evolution process; see page 38, Col. 2. Therefore, applicant's arguments are not persusaive because Ooi at a minimum suggests selection criteria that are biased towards selecting chromosomes having a smaller number of expressed genes.

Applicant's additional arguments on pages 12-15 that the claims should be allowed are not persuasive for the reasons set forth above and in the Final Office Action (mailed 04/05/2011, page 3-5).

Therefore, as ALL claims have been previously rejected and have been shown to be obvious over the cited prior art for the reasons set forth above and in the Final Office Action (mailed 04/05/2011, page 3-5), the proposed amendment does not overcome the rejections of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Whaley whose telephone number is (571)272-4425. The examiner can normally be reached between 11am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marjorie Moran can be reached at 571-272-0720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Pablo S. Whaley/ Examiner, Art Unit 1631